

REMARKS

Claims 1-16 and 18-22 were presented for examination and all claims were rejected. In the current amendment, claim 1 has been amended. No new matter has been introduced. Upon entry of the current amendment, claims 1-16 and 18-22 will be pending, of which claims 1 and 14 are independent. Applicants submit that claims 1-16 and 18-22 are patentable and in condition for allowance.

The following comments address all stated grounds of rejection. Applicants respectfully traverse all rejections and urge the Examiner to pass the claims to allowance in view of the remarks set forth below.

CLAIM REJECTIONS UNDER 35 U.S.C. §112

In the Office Action, claims 1-13 were rejected under 35 U.S.C. §112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, claim 1, upon which claims 2-13 depend, recited “the operating system” with insufficient antecedent basis. Claim 1 has been amended to address this rejection. No new matter has been added. Accordingly, Applicants request the Examiner to withdraw the objection to claims 1-13.

CLAIM REJECTIONS UNDER 35 U.S.C. §103**I. Claims 1-16 and 18-22 Rejected under 35 USC §103(a)**

Claims 1-5 and 8-13 were rejected as unpatentable over U.S. Patent No. 7,203,941 to Demsey et al. (“Demsey”) in view of U.S. Patent No. 4,253,145 to Goldberg (“Goldberg”). Claims 6-7, 14-16 and 18-22 were rejected as unpatentable over Demsey in view of Goldberg and in further view of U.S. Patent No. 7,206,819 to Schmidt (“Schmidt”). Claims 2-13 depend on and incorporate all of the patentable subject matter of independent claim 1, amended herein. Claims 15-16 and 18-22 depend on and incorporate all of the patentable subject matter of independent claim 14. Applicants traverse these rejections and submit that Demsey, Goldberg, and Schmidt, alone or in combination, fail to teach or suggest each and every feature of the claimed invention.

A. Independent Claims 1 and 14 Patentable over Demsey, Goldberg, and Schmidt

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. Claims 1 and 14 are directed towards a method and

apparatus for virtualizing access to native resources, respectively. The claims recite receiving a request to access a native resource provided by an operating system from a process executing within the context of an isolation environment. The isolation environment includes an application isolation layer and a user isolation layer. The Applicants have explicitly defined these terms as they appear in the claims. An application isolation layer provides an application program with a unique view of native resources (see specification, para. 62). A user isolation layer provides a view of native resources that is further altered based on the user identity of a user (*Id.*, para. 65). Thus, the application isolation layer and user isolation layer are distinct. Demsey, Goldberg, and Schmidt, alone or in combination, fail to teach or suggest each and every element of the claimed invention, as amended.

Neither Demsey, Goldberg, nor Schmidt teach or suggest an isolation environment including an application isolation layer and a user isolation layer. In the Office Action, the Examiner equates the application isolation layer and user isolation layer to Demsey's "managed code portion" and "user code" (see Office Action, page 6, para. 1). However, as shown in Demsey's Fig. 1 and described at col. 5, lines 46-48, applications *are* "user code." As such, Demsey's "user code" is merely any application installed by the user other than the virtual machine (104 in Fig. 1) and the operating system (726 in Fig. 1). Essentially, the Examiner is reading the user isolation layer to involve applications rather than users. However, this is a different usage of the term than the one defined by the Applicants, and as such, Demsey does not teach or suggest a user isolation layer. Furthermore, applications in Demsey are not isolated from each other, but rather share the same native resources (see Demsey, col. 7, lines 33-36). Demsey is merely describing a tracking system for resource handles for the purpose of reallocating resources to applications and performing garbage collection routines (see Demsey, col. 2, lines 19-23 and Summary). As such, Demsey is not describing an isolation environment, and silent regarding both an application isolation layer and a user isolation layer.

The Examiner cites Goldberg for the purpose of describing mapping a virtual resource name to a real resource name (see Office Action, page 7, para. 1). Goldberg describes a system for mapping virtual resources of a virtual machine to native resources of a physical machine. For example, a virtual machine stored at memory locations 3k-8k calling to memory location 0 may have the call remapped to location 3k (see Goldberg, Fig. 8a). However, all virtual machines have scheduled access to the same native resources. Thus, applications, even those on different machines, are not isolated from each other. Furthermore, Goldberg is silent regarding user isolation.

The Examiner cites Schmidt for the purpose of describing a virtual namespace to access a registry key (see Office Action, page 12, para. 1). Schmidt describes a virtual namespace that remaps resource locations. However, Schmidt's "underlying file system is globally available" (see Schmidt, col. 5, lines 63-64), and "capsules may export portions of their view to other capsules to support data sharing." (see Schmidt, col. 6, lines 11-12). Thus, Schmidt is not describing application or user isolation, but merely remapping calls for resources to locations dedicated to each capsule.

Because Demsey, Goldberg, and Schmidt, alone or in combination, fail to teach or suggest each and every element of the claimed invention, Applicants submit that independent claims 1 and 14 are patentable and in condition for allowance. Claims 2-13 depend on and incorporate all of the patentable subject matter of independent claim 1. Claims 15-16 and 18-22 depend on and incorporate all of the patentable subject matter of independent claim 14. Therefore, Applicants submit that claims 2-13, 15-16 and 18-22 are also patentable and in condition for allowance. Accordingly, Applicants request the Examiner to withdraw the rejection of claims 1-16 and 18-22 under 35 U.S.C. §103.

CONCLUSION

In light of the aforementioned arguments, Applicants contend that each of the Examiner's rejections has been adequately addressed and all of the pending claims are in condition for allowance. Accordingly, Applicants respectfully request reconsideration, withdrawal of all grounds of rejection, and allowance of all of the pending claims.

Should the Examiner feel that a telephone conference with Applicants' attorney would expedite prosecution of this application, the Examiner is urged to contact the Applicants' attorney at the telephone number identified below.

Respectfully submitted,

CHOATE, HALL & STEWART, LLP

Dated: May 26, 2009

/John D. Lanza/

John D. Lanza

Reg. No. 40,060

Attorney for Applicants

Choate, Hall & Stewart, LLP

Two International Place

Boston, MA 02110

(617) 248-5000